A SURVEY OF THE SALTATORIA OF THE BRISTOL AREA AND NORTH SOMERSET

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(Concluded from Vol. 93 page 171)

Common Green Grasshopper Omocestus viridulus (L.)

In summer and early autumn the loud and prolonged (up to 20 seconds or so) pulsating song of this emerald-green or olive-brown insect can be guaranteed to attract one's attention in the wide range of open, grassy situations it frequents. In the area under review in this paper it may be heard commonly from the boggy pastures of the Somerset peat moors and the lush riverside meadows

to the grassy slopes of the ranges of limestone hills.

I have personal records of it from the following localities, unless otherwise stated in parentheses: Batheaston (Blathwayt, 1906); Brown's Folly, Bathford, 1971; Gordano Valley: Walton Moor 1962 - 79; Weston Moor 1975 - 79 and Walton Common 1975 - 76; Failand Golf Course, near Bristol 1963; Broadfield Farm Combe, near Goblin Combe, 1964; Burrington Combe, 1964; Brean Down, 1972 - 74; Mendip Hills: Crook Peak 1974, Wavering Down 1975, and Velvet Bottom, Charterhouse 1955 (D.K.M. Kevan and J. Cowley) 1964 - 75; Somerset Peat Moors: Street Heath 1945 (J. Cowley, 1949), Ashcott Heath 1963, Meare Heath 1963 - 67, Shapwick Heath 1948 (J. Cowley), 1971 - 76 and Westhay STNC Reserve 1965.

At Charterhouse-on-Mendip on 24th July 1955, D.K.M. Kevan and J. Cowley found *viridulus* parasitized by the fungus *Entomophthora grylli* (det. by W. D. Hincks).

Mottled Grasshoper Myrmeleotettix maculatus (Thunb.)

Although highly polymorphic, this little grasshopper can easily be identified by its clubbed antennae, a character it shares with only one other British species — the Rufous Grasshopper Gomphocerippus rufus, which is larger and possesses more distinctly clubbed antennae with white tips. The song of the male Mottled Grasshopper consists of a series of some twenty short chirps delivered quietly at first, but gradually rising to a crescendo within a space of 10 - 15 seconds.

Although heather moors and heaths with sufficient grass are its favoured haunts, it also occurs on sand dunes, and chalk and limestone hills, especially where the turf is short and the rock is exposed. It is therefore locally common on the Mendip Hills and on the carboniferous limestone hills extending northwards from them towards Bristol. I have records of it from the following localities (my observations unless otherwise stated): Batheaston (Blathwayt, 1906); Brown's Folly, Bathford 1971; Berrow sand dunes, 1945 - 54 (J. Cowley); Flax Bourton Combe, 1960;

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Broadfield Farm Combe, near Goblin Combe, 1964; Goblin Combe, 1964; and on the Mendips proper at Crook Peak 1960, 1964, 1972 and 1974; Burrington Combe 1964; Charterhouse 1955 (D.K.M. Kevan and J. Cowley), and Velvet Bottom, near Charterhouse 1964.

Rufous Grasshopper Gomphocerippus rufus (L.)

Although readily identified by its white-tipped, strongly clubbed (less so in the female) antennae, this generally brown, largish grasshopper seems to have been much overlooked in the area under review. For more than a decade the only known localities in Somerset were all on the Polden Hills where J. Cowley (1952) first discovered a colony on Walton Hill on 5th September, 1948, and where I found it continuing to flourish on visits made during 1964, 1971, 1974 and 1976. In 1950 J. Cowley also found colonies in "sheltered spots in rough long grass" elsewhere on the Poldens: Socombe Hill, near Edington (still there in 1953), Cock Hill and in a railway cutting at Cossington.

Recently R. S. Cropper has discovered *rufus* on Portishead Down (1977) and reported it from the Mendips. I have searched for it on the carboniferous limestone hills around Clevedon, Ticken-

ham, Wraxall and Failand without success.

Lesser Marsh Grasshopper Chorthippus albomarginatus (DeG.)

This variable grasshopper is locally common on the coastal dunes and marshes along the entire coastline of the area under review, and is also to be found well inland over a wide area of the Central Somerset Levels. I have records of its occurrence (those uncredited are my own) from the following localities: Edington Moor 1945 and 1947 (J. Cowley, 1949); Catcott Heath (wet peat pastures) 1947 (J. Cowley 1949) and 1950 (J. Cowley, D. G. Brown and J. H. P. Sankey); Oxenpill, Westhay1964 (with D. R. Ragge); Berrow sand dune slacks 1950 and 1954 (J. Cowley); Brean to Lympsham 1960; Clevedon Pill and seawall 1967 - 1976.

Common Field Grasshopper Chorthippus brunneus (Thunb.)

Much more variable in colour and markings than the last species; indeed, this grasshopper is the most highly polymorphic of all the British species with the possible exception of the Mottled Grasshopper. It is also one of the commonest, and is found abundantly, even in urban areas, throughout the region covered by this paper, except that its preference for dryish habitat means that it is more local in the extensive fens and marshes where much of the grassland is too damp and lush.

I have specific records of it from the following localities: Bristol: Clifton and Durdham Downs, 1960 - 79; King's Weston Down, 1970; Shirehampton, 1977; Henleaze, 1977 - 79; Mangotsfield, 1979; Hambrook and Whiteshill, 1978; Ashton Park, 1963 - 77; Leigh Woods, 1962 - 79. North Somerset: Pill, 1961 - 77; Easton-in-Gordano, 1964; Weston-in-Gordano and Walton Common, 1967 - 76; Portishead, 1960 - 78; Failand Golf-course, 1963 - 78; Cadbury

Camp, near Tickenham and Tickenham Hill, 1964 - 65; Clevedon (Church Hill, Wain's Hill, Court Hill, Walton Castle Hill, the seawall and Clevedon Town F.C. ground), 1967 -79; Flax Bourton 1960; Brockley Combe, 1971; Broadfield Farm Combe, near Goblin Combe, 1964; Mendips: Blagdon, 1950 (J. Cowley); Uphill, 1951 (J. Cowley); Brean Down, 1972 - 74; Bleadon Hill, 1960; Crook Peak, 1960 - 74; Burrington Combe, 1953 (J. Cowley) 1964; Westbury and Ebbor, 1964; Charterhouse, 1955 (D. K. M. Kevan); Velvet Bottom, near Charterhouse, 1964 and Priddy, 1964; Batheaston (Blathwayt 1906); Brown's Folly, Bathford, 1971; Central Peat Moors: Ashcott Heath, 1965 - 67; Meare Heath, 1963 - 79; Shapwick (Walton, 1944); Shapwick Heath, 1950 (J. Cowley), 1976; Langport, 1961 and Muchelney, 1961; Berrow sand dunes 1945 and 1950 (J. Cowley), Bridgwater, 1952 (J. Cowley); Polden Hills: Edington, 1947 (J. Cowley, 1949) and 1950 (J. Cowley); Socombe Hill and Cock Hill, 1950 (J. Cowley); Cossington, 1950 (J. Cowley) and Walton Hill, 1964 - 76.

In hot weather *brunneus* is capable of prodigious leaps and glides: one I watched at Clevedon on 11th August, 1967 lept to an estimated height of almost two metres and glided some seven metres

over level ground, assisted only by a light breeze.

Meadow Grasshopper Chorthippus parallelus (Zett.)

Another abundant *Chorthippus* grasshopper in the Bristol area and North Somerset easily distinguished from the other species in this genus by its vestigial wings (especially in the female) which render it quite unable to fly. However, very occasionally a form with fully developed wings occurs, though I have yet to encounter it in this district. The chattering stridulation of the males, once learnt, is also unmistakable. It tends to shun urban areas and dry grassland, otherwise is pretty ubiquitous.

The following is a list of localities known to me; my records unless otherwise stated: Bristol: Clifton and Durdham Downs 1978 - 79; King's Weston Down, 1970; Ashton Park, 1963 - 74;

Leigh Woods 1962 - 79; Hambrook and Whiteshill 1978.

North Somerset: Abbots Leigh, 1964; Pill, 1960 - 66; Eastonin-Gordano, 1964; Weston Moor, Weston-in-Gordano, 1964 - 79; Walton Common, Walton-in-Gordano, 1975 - 76; Walton Moor, Walton-in-Gordano 1962 - 79; Clevedon (Church Hill, Wain's Hill, Court Hill, Walton Castle Hill, Clevedon Pill and seawall), 1964 - 79; Failand Golf-course, 1963 - 78; Cadbury Camp, 1964 - 65; Tickenham Hill, 1964; Flax Bourton, 1960; Brockley Combe, 1971; Broadfield Farm Combe, near Goblin Combe, 1964; Chew Valley Lake, 1962; Brown's Folly, Bathford, 1971; Batheaston (Blathwayt 1906); Mendips; Brean Down 1972 - 74; Bleadon Hill, 1960; Crook Peak, 1960 - 74; Wavering Down, 1975; Burrington Combe, 1964; Cheddar Gorge, 1960; Westbury and Ebbor, 1964; Charterhouse, 1955 (D.K.M. Kevan) and Velvet Bottom, near Charterhouse, 1964 - 75; Central Somerset Levels: between Brean and Lympsham, 1960; Westhay Moor, 1954 (J. Cowley), 1964 - 65; Meare Heath, 1963 - 79; Shapwick Heath, 1952 (J. Cowley), 1963 - 76; Catcott

Heath, 1947 and 1950 (J. Cowley); Edington Moor 1947 (J. Cowley); Street Heath, 1945 and 1947 (J. Cowley); Aller Wood, Othery, 1971; Polden Hills: Edington, 1947 (J. Cowley); Socombe Hill, 1950 (J. Cowley): Walton Hill, 1964 - 74 and Great Breach Wood, 1971 - 74.

GROUND-HOPPERS (Family Tetrigidae)

Slender Ground-hopper Tetrix subulata (L.)

Being small, dark-coloured and generally inconspicuous the ground-hoppers are easily overlooked and this has undoubtedly happened in the area covered by this paper. I am conscious that my own searches have been far from systematic: when I have made an effort I have experienced little difficulty in finding either this or the next species in suitable localities. The form bifasciata, in which the pronotum and hind-wings are considerably shortened, is not uncommon. I have found it in the Gordano Valley and on

Meare and Westhay Moors in the Somerset Peat Moors.

The damp-loving Slender Ground-hopper seems to be locally common in the peat moors and levels of the Bristol district and North Somerset, but I only know of positive records from the following places (my records unless otherwise stated): Combe Dingle, Bristol 1950 (J. Cowley); Walton Moor, 1964 and Weston Moor, 1972 - 75; Blagdon Reservoir, 1950 (J. Cowley), Ebbor Wood, Mendip, 1952 (J. Cowley); Central Peat Moors: Ashcott, 1941 (Blair, 1941); Meare Heath, 1963 - 79; Oxenpill, Westhay, 1964; Catcott Heath, 1945 and 1950 (J. Cowley); Shapwick Heath, 1953 (J. Cowley) and Street Heath, 1949 - 53 (J. Cowley); Loxley Wood, Shapwick, 1947 (J. Cowley); Edington, 1945 - 46; 1950 - 52 (J. Cowley); dune slacks at Berrow, 1951 (J. Cowley) and Lollover Hill, Compton Dundon, 1958 (J. Cowley).

Common Ground-hopper Tetrix undulata (Sow.)

By far the most widespread of the three British ground-hoppers, undulata is smaller and stouter than subulata with much shorter hindwings; and although it overlaps with the latter's choice of habitats, it occupies a wider range, including quite dry conditions such as those pertaining on heaths and sand dunes. It has almost certainly been much overlooked in the area reviewed by this paper and is probably more or less generally distributed in suitable places. Records known to me are as follows: Walton Moor, Gordano Valley, 1971 (J.F.B.); Goblin Combe, 1952 (J. Cowley); Asham Wood, Downhead and Vallis Vale, Selwood, 1953 (J. Cowley); Shepton Mallet (Brown, 1939) Street Heath, 1950 and 1952 (J. Cowley); Shapwick Heath, 1951 (J. Cowley); Westhay Moor, 1954 (J. Cowley); Oxenpill, near Westhay, 1964 (J.F.B.); and Meare Heath, 1964 - 69 (J.F.B.).

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D'ABRERA'S BUTTERFLIES OF THE AFRO-TROPICAL REGION. -I must make a correction to a factual statement made by a reviewer (C.G.C.D.) in Ent. Record, 93: 195. In the last paragraph it is stated that the author Mr. D'Abrera intends to bring out a second edition of this book. I do not know where this information came from but it is, to my certain knowledge, not true. - The question of a supplement may be in Mr. D'Abrera's mind but of this again I know not. - E. W. CLASSEY (Sole Agent for Butterflies of the Afro-Tropical Region), P. O. Box 93, Faringdon, Oxon. SN7 7DR.